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December 11, 2003

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APPLICATION NUMBER: ***60/416,684***
FILING DATE: ***October 07, 2002***
RELATED PCT APPLICATION NUMBER: *PCT/US03/31608*

By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
George C.	Konstantakis	7969 S. Forest Meadows Dr., Franklin, WI 53132
Georgia L.	Konstantakis	7969 S. Forest Meadows Dr., Franklin, WI 53132

☐ *Additional inventors are being named on the ___ separately numbered sheets attached hereto*

TITLE OF THE INVENTION (280 characters max)

ACCESS-LIMITING DOOR LEVER STOPPER

Direct all correspondence to: **CORRESPONDENCE ADDRESS**

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ENCLOSED APPLICATION PARTS *(check all that apply)*

☑ Specification *Number of Pages* 4 ☐ CD(s), Number

☑ Drawing(s) *Number of Sheets* 5 ☑ Other (specify) Return Postcard

☐ Application Data Sheet. See 37 CFR 1.76

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT

☑ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check or money order is enclosed to cover the filing fees

☑ The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 17-0055

☐ Payment by credit card. Form PTO-2038 is attached.

FILING FEE AMOUNT ($) $80.00

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☑ No.

☐ Yes, the name of the U.S. Government agency and the Government contract number are _____

Respectfully submitted,

SIGNATURE _____ Date 10/ 07 / 02

TYPED or PRINTED NAME Keith M. Baxter REGISTRATION NO. *(if appropriate)* 31,233

TELEPHONE 414.277.5719 Docket Number: 550637.90018

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

5312562

[redacted]

60/416,804 100702

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FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision

☑ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($) 80.00

Complete if Known	
Application Number	60/
Filing Date	October 7, 2002
First Named Inventor	George C. Konstantakis
Examiner Name	
Group Art Unit	
Attorney Docket No	550637.90018

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☑ Deposit Account

Deposit Account Number: 17-0055

Deposit Account Name: Quarles & Brady LLP

The Commissioner is authorized to: (check all that apply)

☑ Charge fee(s) indicated below ☑ Credit any overpayments

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to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	740	2001	370	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	510	2003	255	Plant filing fee	
1004	740	2004	370	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	80.00

SUBTOTAL (1) ($) 80.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

			Extra Claims		Fee from below		Fee Paid
Total Claims		-20** =		X		=	0.00
Independent Claims		-3** =		X	.	=	0.00
Multiple Dependent						=	

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0.00

**or number previously paid, if greater. For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2050	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	400	2252	200	Extension for reply within second month	
1253	920	2253	460	Extension for reply within third month	
1254	1,440	2254	720	Extension for reply within fourth month	
1255	1,960	2255	980	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,280	2453	640	Petition to revive - unintentional	
1501	1,280	2501	640	Utility issue fee (or reissue)	
1502	460	2502	230	Design issue fee	
1503	620	2503	310	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1 17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	740	2809	370	Filing a submission after final rejection (37 CFR § 1 129(a))	
1810	740	2810	370	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	740	2801	370	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) ___

*Reduced by Basic Filing Fee Paid SUBTOTAL (3) ($) 0.00

SUBMITTED BY

				Complete (if applicable)	
Name (Print/Type)	Keith M. Baxter	Registration No (Attorney/Agent)	31,233	Telephone	414.277.5719
Signature	[signature]			Date	October 7, 2002

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Title of Invention:	Access-Limiting Door Lever Stopper
Date of Invention:	
Inventor(s):	George C. Konstantakis and Georgia L. Konstantakis 7969 S. Forest Meadows Drive Franklin, Wisconsin 53132
Citizenship:	U.S.
Cross- References to Related Application:	Unknown

I. Abstract

An access-limiting door lever stopper includes two parts; a downward stopper and an upward stopper. This invention is symmetrical and will work for both left-handed and right-handed hinged doors. This invention works in application by capturing an existing door lever and limiting rotation by using the existing door stop. With the device installed and the door closed, if the lever is rotated in either direction, a jamb post on either the downward stopper or the upward stopper will engage the door stop resisting further rotation. An operator of sufficient means may open the door when rotating the door lever upward.

II. Background of Invention

If small children or the mentally infirmed are allowed to open a door and to exit from a secure area by turning the door lever a potential danger to their well-being arises. This device is primarily used to prevent children from access to and from certain rooms in a home.

Accordingly, there exists today a need for a removable door lever stopper that is easy to apply and remove by a caregiver and yet is difficult to remove by the person for whom access is to be restricted. Clearly, such an apparatus is a useful and desirable device.

As far as the Applicant is aware door lever stoppers have not been achieved in the past, however, rotary knob covers are, in general, known.

III.Object of the Invention

An adult parent may wish to keep certain rooms, closets, or cabinets in the home off limits. Child fatalities resulting from toilet bowl drowning, ingestion of poisons or overdoses of other substances are common enough to take adequate precautions to prevent children from access to contents of certain rooms.

It is an object of the present invention to provide a door lever stopper which is simple in construction and has a minimum of moving parts but which, at the same time, requires consecutive actions which are beyond the capability of a child.

IV. Brief Description of the Drawings

An embodiment of the invention is described below depicting a right-handed door situation with reference to the accompanying drawings, in which:

FIG. 1 is a top view of the assembly including a lever **20**, door **14** cutaway, door stop **18** cutaway, and a door jamb **16** cutaway for reference;

FIG. 2 is a front view of the assembly including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 3 is a right projection view of the assembly including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 4 is an isometric view of the assembly including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 5 is a top isometric view of the downward stopper;

FIG. 6 is a bottom isometric view of the downward stopper;

FIG. 7 is a top isometric view of the upward stopper;

FIG. 8 is a bottom isometric view of the upward stopper;

FIG. 9 is an exploded isometric view of the downward stopper and lever in initial assembly orientation for reference;

FIG. 10 is an exploded isometric view of the assembly including a lever for reference;

FIG. 11 is a front view of the assembly in a downward locked condition including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 12 is a front view of the assembly in an upward locked condition including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 13 is a rendered isometric view of the assembly installed on a right-handed door including a lever for reference.

FIG. 14 is a rendered isometric view of the assembly installed on a left-handed door including a lever for reference.

V. Detailed Description of the Invention

According to the invention an access-limiting door lever stopper includes a downward stopper **12** and an upward stopper **10**. When installed over an existing lever **20**, this invention will limit both clockwise and counterclockwise rotation of a door lever **20** with the intent of limiting the ability of the door **14** to which the lever is attached to be opened. Both components of this invention are symmetrical, and will work for both left-handed (FIG. **14**) and right-handed (FIG. **13**) doors.

FIG. **5** and FIG. **6** include details of the downward stopper **12**; two rotation-limiting cylinders **22**, one on either side, a lever post **24**, a jamb post **26**, and a lever hub rest **28**.

FIG. 7 and FIG. 8 include details of the upward stopper **10**; two finger tabs **30**, one on either side, a lever post **32**, a jamb post **34**, two flexible lever hub retaining ears **36**, one on either side, two rotation-limiting slots **38**, one on either side, and a center recess **40**.

For installation, with the door open and the lever **20** rotated upward so as to be approximately perpendicular to the floor as shown in FIG. **9**, the downward stopper **12** is placed over the hub **44** such that the hub rest **28** comes into contact with it, and the lever is allowed to return to its preloaded state as shown in Figure **10**, placing the downward stopper in a captured position. The upward stopper **10**, which is recessed **40** so as to accommodate the downward stopper geometry, is then placed over the downward stopper, and the slots **38** in the upward stopper snap around the cylinders **22** in the downward stopper. With the two components assembled, the door may be closed. The operator may have to temporarily rotate the lever so as to allow the door to be closed. When the door has been closed, the invention will be in its operating state.

In its operating state, as depicted by FIG. **11**, the door lever **20** has a downward preload that forces the downward stopper to engage the door stop **18**. As the door lever is rotated downward, the underside **42** of the lever engages the downward stopper's lever post **33** at the interface **50**, causing the downward stopper to rotate in the same downward direction which in turn causes the downward stopper's jamb post **26** to engage the door stop **18** at the interface **48** resulting in resistance to further downward rotation. Likewise, as depicted by FIG. **12**, as the door lever is rotated upward, the top side **44** of the lever engages the upward stopper's lever post **32** at the interface **54**, causing the upward stopper to rotate in the same upward direction which in turn causes the upward stopper's jamb post **34** to engage the door stop **18** resulting in resistance to further upward rotation.

When an operator of sufficient means wishes to open the door, they do so by using the forefinger and thumb to press together the finger tabs **30** of the upward stopper, lift and disengage the upward stopper. The lever is then free to rotate upwards so as to allow the door to be opened. Also, the interface between the upward stopper and the lever hub **44** is such that an operator of sufficient means may provide enough torque when rotating the door lever upward to force the retaining ears **36** to flex and allow the upper stopper to lift off of the lever hub so that the lever is allowed to rotate upward enough to allow the door to be opened.

There are two methods of use of this invention. The preferred is to use both the upward and downward stoppers as described above. However, if one wishes not to use the upward stopper, the downward stopper alone will resist downward rotation only, leaving upward rotation unrestrained.

The lever posts and jamb posts of both the upward and downward stoppers are of appropriate geometry to contact all necessary points on the door, door stop and lever providing added stability when stationary or when in operation.

The preferred embodiments of both the upward stopper and the downward stopper are depicted by the rendered images of FIG. **13** and FIG. **14** showing the aesthetic curves and contours of the design. The approximate dimensions of the components are also depicted in FIG. **13** making this invention suitable for any lever-operated, hinged cabinet doors or room doors a home. The preferred materials would be plastics; nylon, polypropylene families or similar.

VI. Claims

1. An access-limiting door lever stopper for existing door lever assembled to existing door assembly requires no disassembly or modification of existing door hardware.
2. The access-limiting door lever stopper in claim 1 which includes a downward stopper and an upward stopper.
3. The access-limiting door lever stopper in claim 1 which is symmetrical and will work for both left-handed and right handed doors as well as inward and outward opening doors.
4. The access-limiting door lever stopper in claim 1 which works in application by capturing an existing door lever and limiting rotation by using the existing door stop.
5. The access-limiting door lever stopper in claim 1 in which an operator of sufficient means may open the door.
6. The access-limiting door lever stopper in claim 1 less the upward stopper which will resist downward rotation only, leaving upward rotation unrestrained.
7. The access-limiting door lever stopper in claim 1 in which the lever posts and jamb posts of both the upper and downward stoppers are of appropriate geometry to contact all necessary points on the door, door stop and door jamb providing added stability when stationary or when in operation.

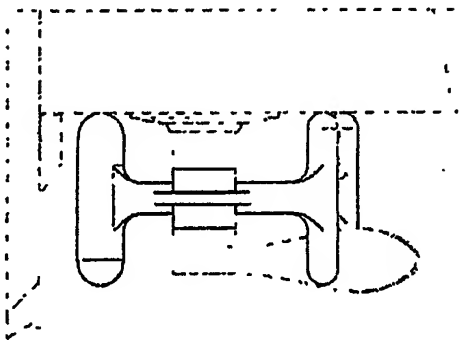

FIG. 1

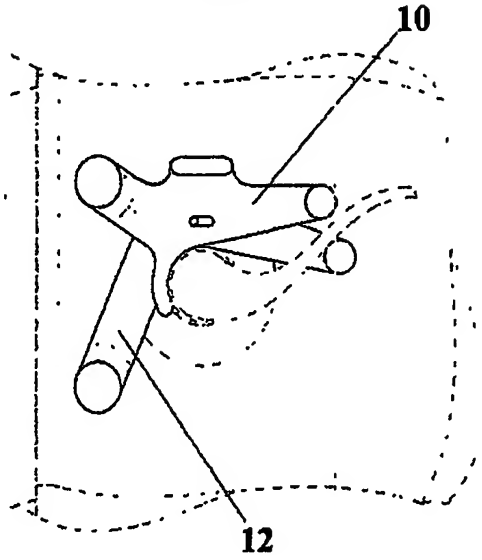

FIG. 2

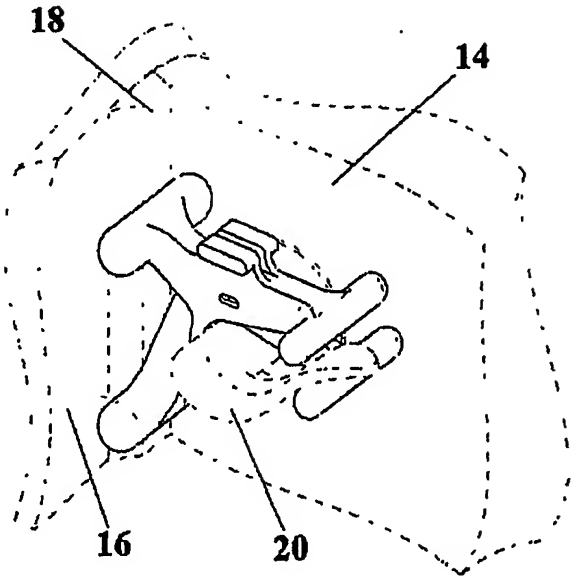

FIG. 4

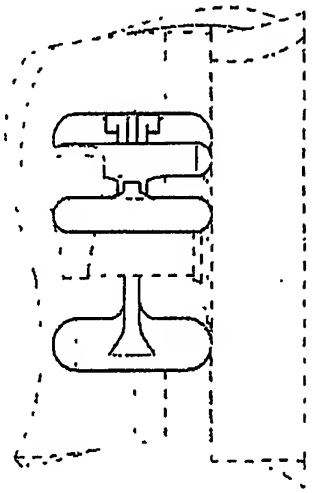

FIG. 3

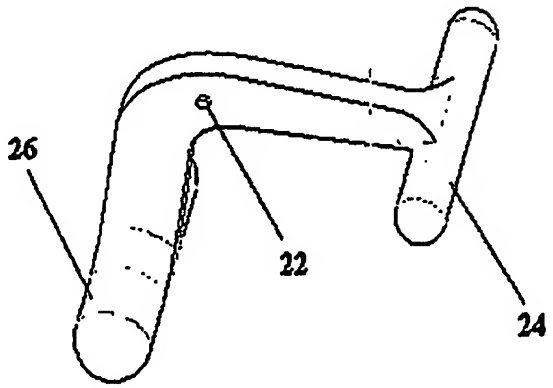

FIG. 5

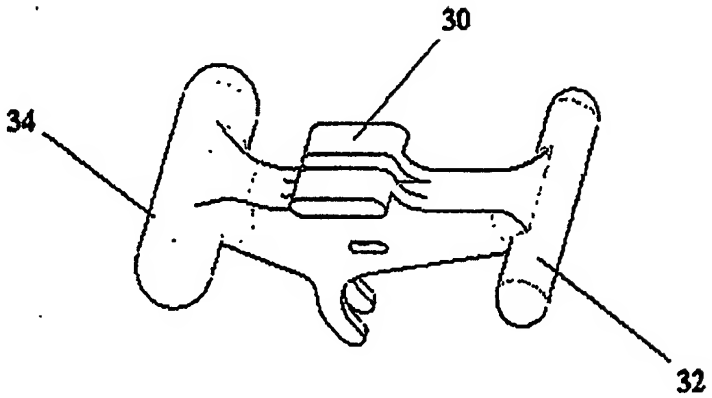

FIG. 7

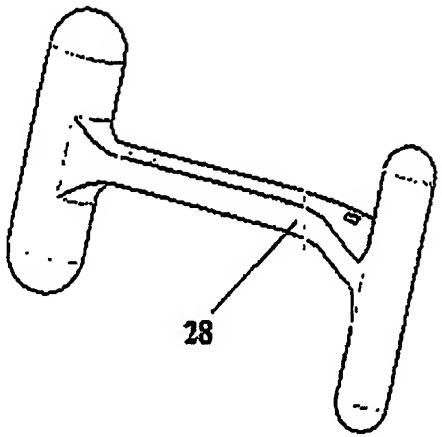

FIG. 6

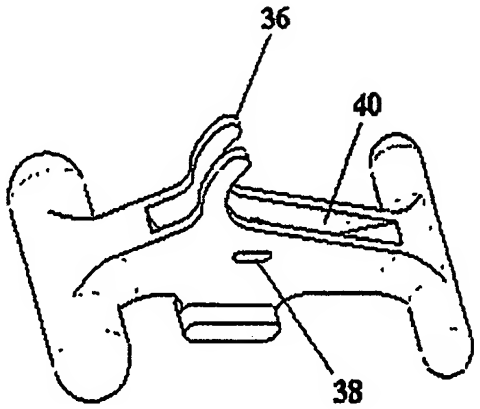

FIG. 8

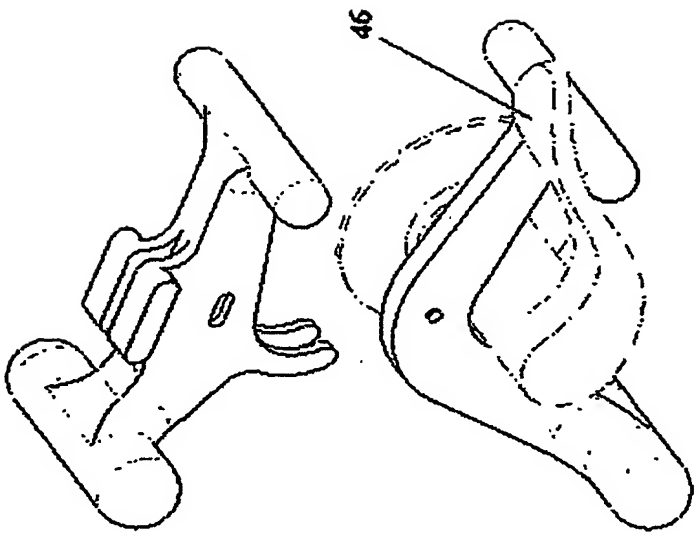

FIG. 10

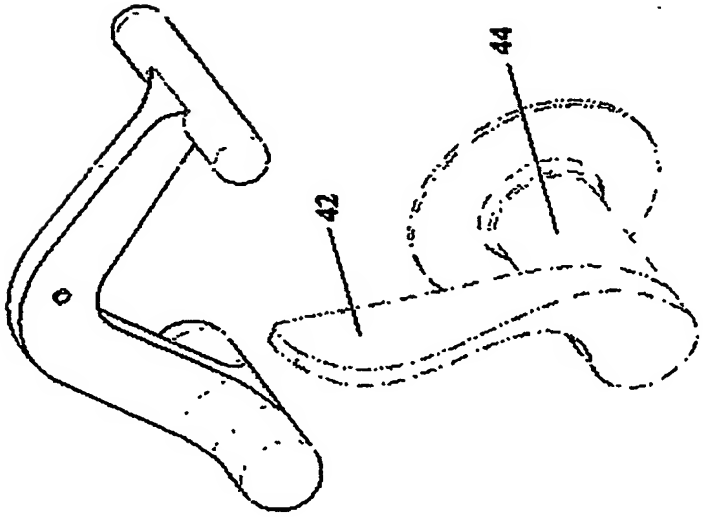

FIG. 9

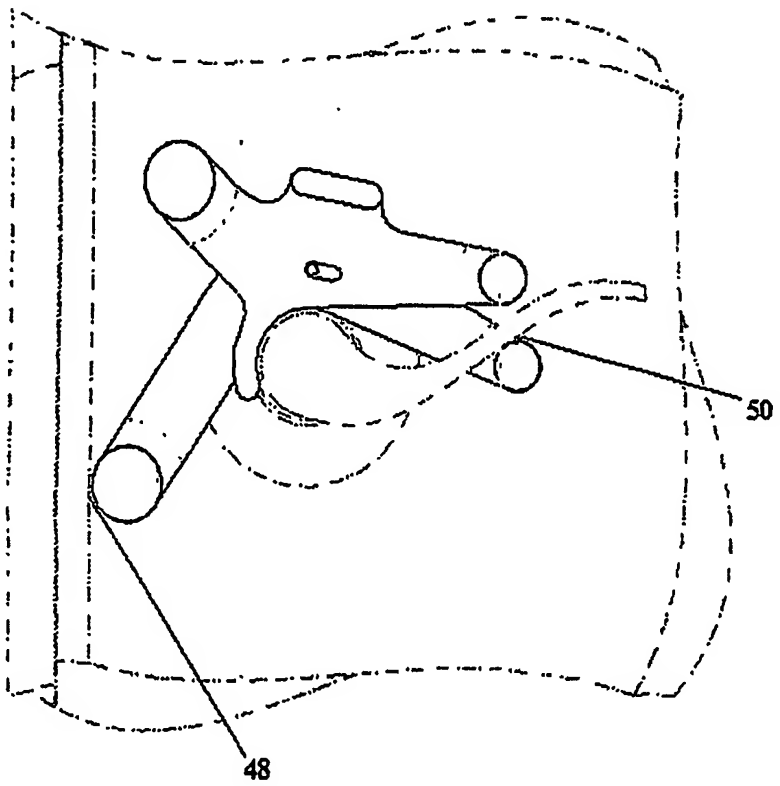

FIG. 11

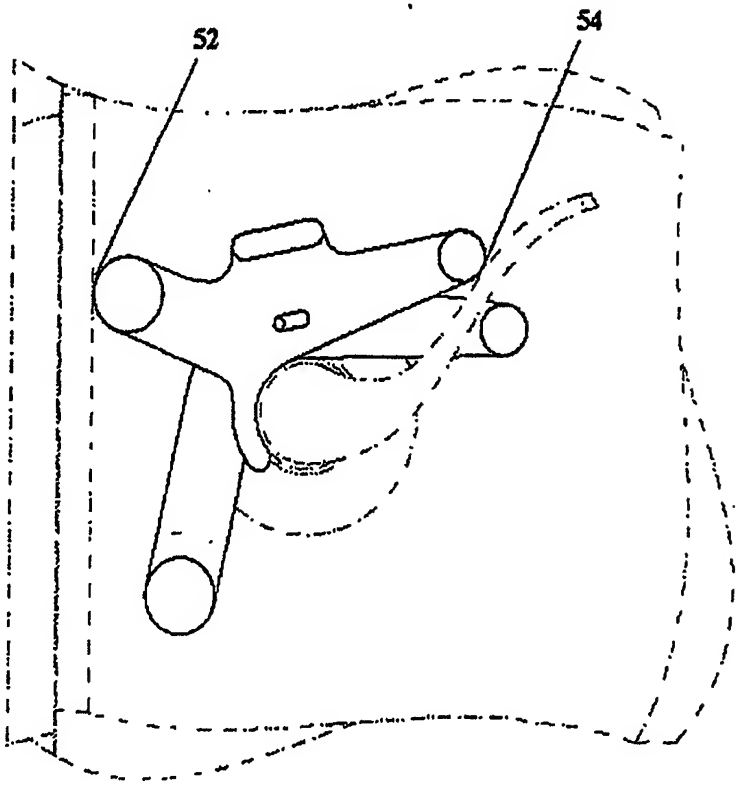

FIG. 12

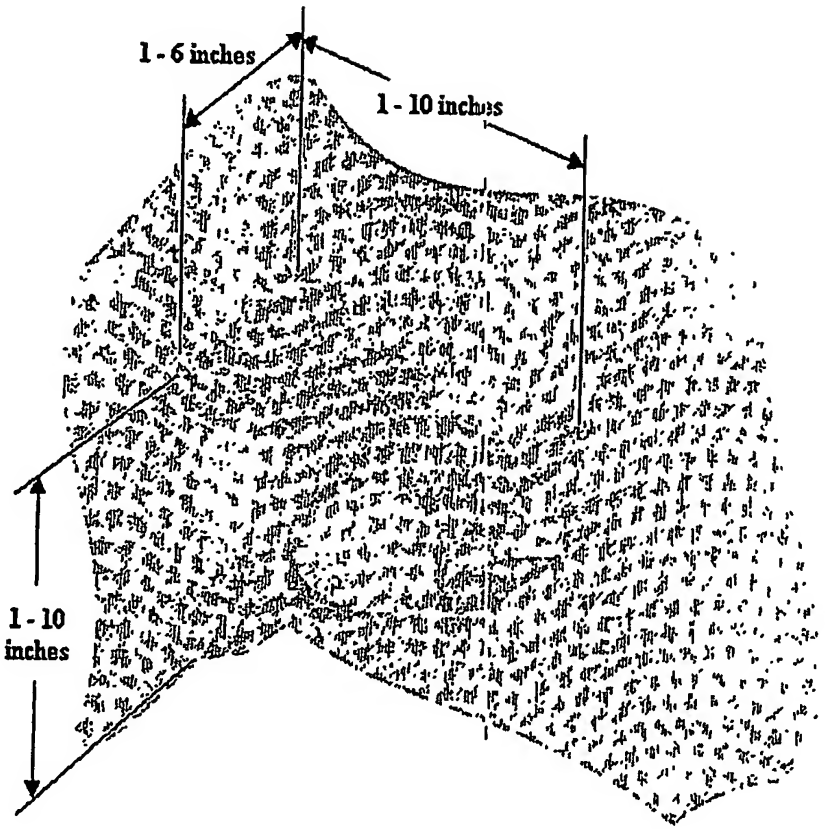

FIG. 13

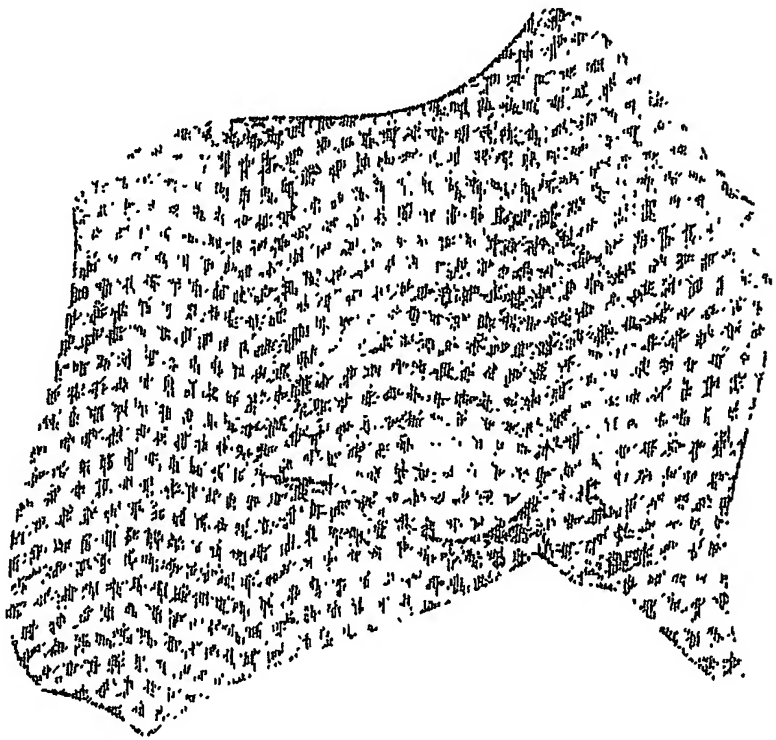

FIG. 14